



GEANT2

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GÉANT2 Topology

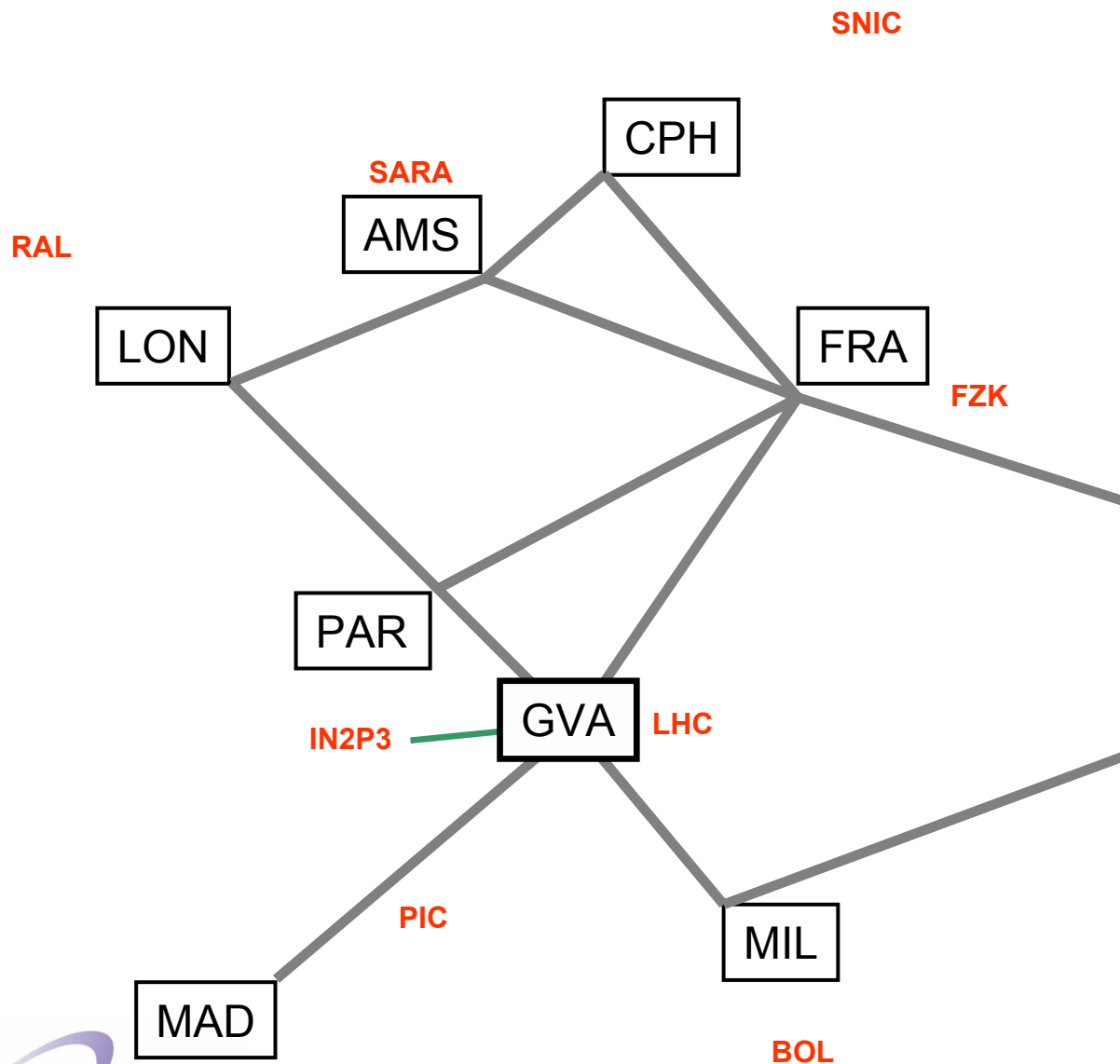
- Up to 15 of 30 consortium partners will be connected to DF
- Selection of preferred providers expected to be completed on 9.5.2005 in Pisa
- On 31.3. all DF routes relevant to the 7 European T1s have been selected



GÉANT2 DF Topology

as relevant to
LHC

up to 6 further
Central
European
locations



Cost Model (1)

- GÉANT2 does not have prices, it shares cost
- The NRENs on the dark fibre cloud subscribe to a **GEANT+** service
- about 2 M€ per NREN per year
- 10Gb/s IP and 10Gb/s worth of p2p services
- This subscription finances the DF backbone
- Extra wavelengths for projects at marginal cost

Cost Model (2)

- Per hop/route cost is composed of a of
 - transponder pair/s
 - trunk ports at the switches
 - access ports at the switches once per route
 - installation, maintenance, operations fees
- On the fibre cloud costs will be calculated independent of number of hops (channels not protected)
- costs annualized over 3 years will be marginal

p2p wavelength services

- p2p λ is not protected
- Protection through
 - NREN fibre where possible
 - GÉANT2 alternate route
 - Cross boarder fibre
- Operation by GÉANT2 NOC

Equipment Selection

- Very short list of providers
- Decision expected on 9.5.2005
- Implementation 4 to 6 months